CLAIMS

We claim:

1. A loading device for loading a web forming wire, said loading device comprising:

a fixed base member;

a movable loading member coupled to said base member, said loading member structured and arranged to move in a vertical fashion relative to said base member to thereby apply a loading force to said wire;

roller means structured and arranged to support said loading member.

2. The loading device according to claim 1, wherein said base member comprises a slide rail which extends from an upper surface of said base member and wherein said loading member is structured and arranged to receive said slide rail.

3. The loading device according to claim 2, wherein said roller means comprises a single roller which extends substantially across the entire width of the loading device and wherein said single roller is coupled to said slide rail by means of a rotating shaft adapted to enable the rotation of said single roller.

5. The loading device according to claim 4, further comprising supporting bearings arranged between said single roller an upper surface of said glide rail for supporting said single roller and wherein said supporting bearings are arranged at selected intervals along a length of said single roller.

6. The loading device according to claim 1, wherein in said roller means comprises a plurality of rollers and wherein said slide rail has a plurality of indentations, each one of said indentations being structured and arranged for receiving one of said plurality of rollers.

7. The loading device according to claim 1, wherein said roller means comprises at least one roller arranged on each side of said slide rail.

8. The loading device according to claim 1, wherein said roller means comprises a plurality of vertically arranged ball stacks, each one of said balls stacks being arranged at selected locations in a cross-machine direction of said loading device and each one of said plurality of ball stacks being housed in a corresponding bushing attached to said loading member.

9. The loading device according to claim 8, wherein each one of said ball stacks are arranged at intervals of 200 to 280 mm from one another in said cross machine direction.

10. The loading device according to claim 1, wherein said loading member, said base member and said slide rail are constructed from glass fiber.

11. The loading device according to claim 1, further comprising a friction reducing means arranged between the base member and said loading member and wherein said friction reducing means comprises one of a friction reducing slide piece and balls/round bars arranged between said base member and said loading member.